

Home Theatre System

Operating Instructions

HT-DDW760

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To prevent fire, do not cover the ventilation of the apparatus with newspapers, table-cloths, curtains, etc. And don't place lighted candles on the apparatus. To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.



Don't throw away batteries with general house waste; dispose of them correctly as chemical waste.

For customers in Canada

CAUTION

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

Except for customers in Europe



ENERGY STAR[®] is a U.S. registered mark. As an ENERGY STAR[®] partner, Sony Corporation has determined that this product meets the ENERGY STAR[®] guidelines for energy efficiency.

About This Manual

- The instructions in this manual are for model HT-DDW760. Check your model number by looking at the lower right corner of the front panel. In this manual, HT-DDW760 models of area code CEL is used for illustration purposes unless stated otherwise.
- The instructions in this manual describe the controls on the receiver. You can also use the controls on the supplied remote if they have the same or similar names as those on the receiver. For details on the use of your remote, see pages 37–43.

The HT-DDW760 consists of:

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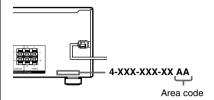
- Sub woofer

 Models of area code CEL, CEK only 	STR-DE497P
 Models of other area code 	STR-K760P
Speaker system	
Front speaker (left)	SS-MSP760L
Front speaker (right)	SS-MSP760R
 Center speaker 	SS-CNP760
 Surround speaker (left) 	SS-MSP760SL
 Surround speaker (right) 	SS-MSP760SR

SA-WMSP76

About area codes

The area code of the receiver you purchased is shown on the lower portion of the rear panel (see the illustration below).



Any differences in operation, according to the area code, are clearly indicated in the text, for example, "Models of area code AA only".

This receiver incorporates Dolby* Digital and Pro Logic Surround and the DTS** Digital Surround System.

- * Manufactured under license from Dolby Laboratories.
 "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.
- ** "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc.

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Getting Started

1: Check how to hookup your components

Steps 1a through 1c beginning on page 7 describe how to hook up your components to this receiver. Before you begin, refer to "Connectable components" below for the pages which describe how to connect each component.

After hooking up all your components, proceed to "2: Connecting the antennas" (page 13).

Connectable components

Component to be connected	Page
DVD player	
With digital audio output ^{a)}	7–8
With multi channel audio output ^{b)}	9–10
With analog audio output only ^{c)}	7–8
TV monitor	
With composite video input only	8, 10 or 12
Satellite tuner	
With digital audio output ^{a)}	7–8
With analog audio output only ^{c)}	7–8
CD player	
With analog audio output only ^{c)}	11
MD/Tape deck	
With analog audio output only ^{c)}	11
Multi channel decoder (Models of area code CEL, CEK only)	9
VCR	12

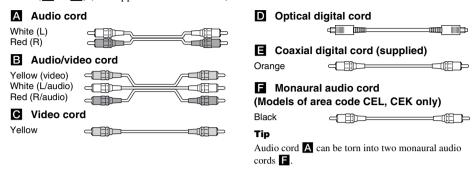
a) Model with a DIGITAL OPTICAL OUTPUT or DIGITAL COAXIAL OUTPUT jack, etc.

b) (Models of area code CEL, CEK only) Model with a MULTI CH OUTPUT jacks, etc. This connection is used to output the audio decoded by the component's internal multi channel decoder through this receiver.

c) Model equipped only with AUDIO OUT L/R jacks, etc.

Required cords

The hookup diagrams on the subsequent pages assume the use of the following optional connection cords (A to F) (not supplied unless indicated).



Notes

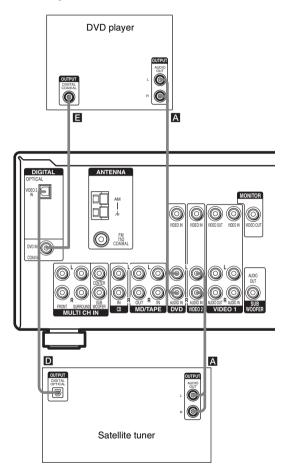
- Turn off the power to all components before making any connections.
- Be sure to make connections firmly to avoid hum and noise.
- When connecting an audio/video cord, be sure to match the color-coded pins to the appropriate jacks on the components: yellow (video) to yellow; white (left, audio) to white; and red (right, audio) to red.
- When connecting optical digital cords, insert the cord plugs straight in until they click into place.
- Do not bend or tie optical digital cords.

1a: Connecting components with digital audio output jacks

Hooking up a DVD player or satellite tuner

For details on the required cords $(\mathbf{A} - \mathbf{F})$, see page 6.

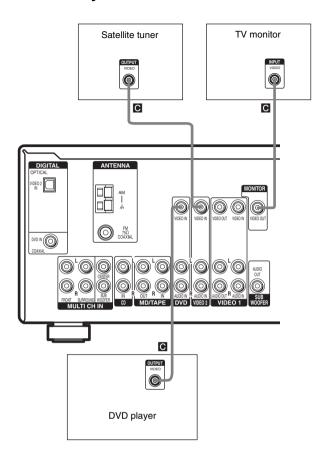
1 Connect the audio jacks.



Note

You can listen to the sound of your TV by connecting your TV's audio output jacks to the VIDEO 2 AUDIO IN jacks on the receiver. In this case, do not connect the TV's video output jack to the VIDEO 2 VIDEO IN jack on the receiver.

2 Connect the video jacks.



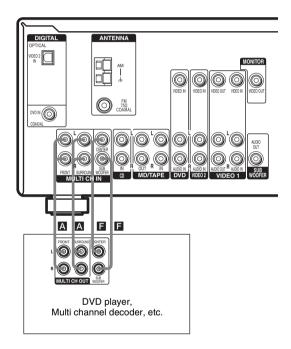
1b: Connecting components with multi channel output jacks

(Models of area code CEL, CEK only)

1 Connect the audio jacks.

If your DVD player is equipped with multi channel output jacks, you can connect it to this receiver's MULTI CH IN jacks to enjoy the multi channel sound. Alternatively, the multi channel input jacks can be used to connect an external multi channel decoder.

For details on the required cords (A-F), see page 6.



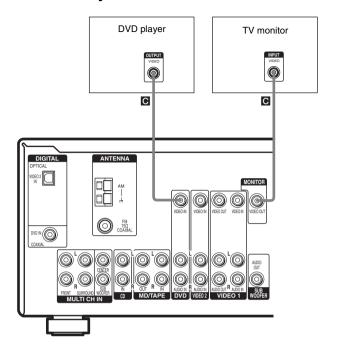
Tip

This connection also allows you to enjoy software with multi channel audio recorded in formats other than the Dolby Digital and DTS.

Note

When you make connections to the MULTI CH IN jacks, you will need to adjust the level of the surround speakers and sub woofer using the controls on the connected component.

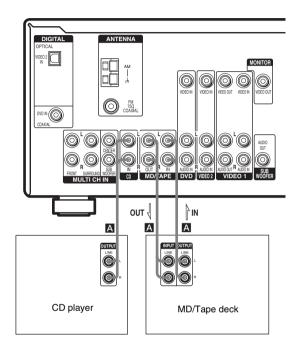
2 Connect the video jacks.



1c: Connecting components with only analog audio jacks

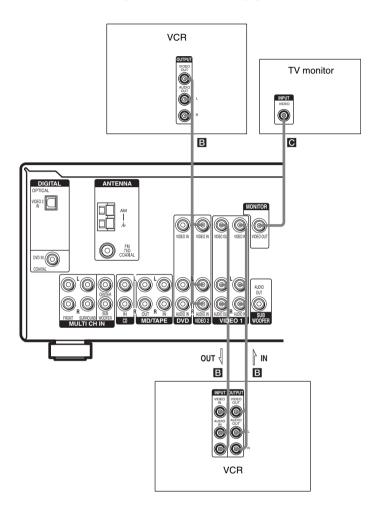
Hooking up audio components

For details on the required cords $(\mathbf{A} - \mathbf{F})$, see page 6.



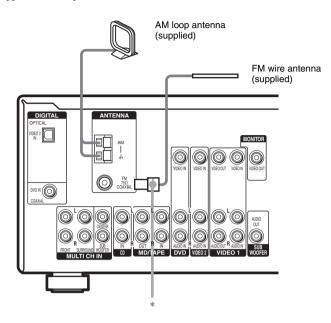
Hooking up video components

If you connect your TV to the MONITOR VIDEO OUT jack, you can watch the video from the selected input (page 20). For details on the required cords (A-F), see page 6.



2: Connecting the antennas

Connect the supplied AM loop antenna and FM wire antenna.



^{*} The shape of the connector varies depending on the area code.

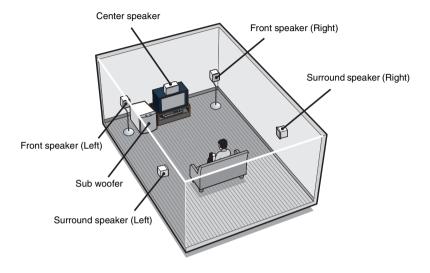
Notes

- To prevent noise pickup, keep the AM loop antenna away from the receiver and other components.
- Be sure to fully extend the FM wire antenna.
- · After connecting the FM wire antenna, keep it as horizontal as possible.

3: Connecting speakers

Connect your speakers to the receiver. This receiver allows you to use a 5.1 channel speaker system. To fully enjoy theater-like multi channel surround sound requires five speakers (two front speakers, a center speaker, and two surround speakers) and a sub woofer (5.1 channel).

Example of 5.1 channel speaker system configuration



Tips

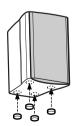
- · Since the sub woofer does not emit highly directional signals, you can place it wherever you want.
- For greater flexibility in the positioning of the speakers, use the optional WS-FV11 or WS-FV10D floor stand (available only in certain countries).

Note

Connect the long speaker connecting cords to the surround speaker terminals and the short speaker connecting cords to the front and center speaker terminals.

Attaching foot pads

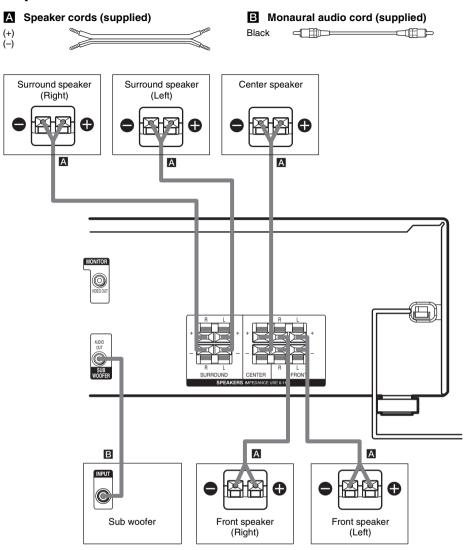
To prevent speaker vibration or movement, attach the supplied foot pads to the speaker as shown in the illustration below.



Note

Be sure to attach the supplied foot pads to the sub woofer as well.

Required cords

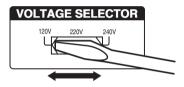


4: Connecting the AC power cord

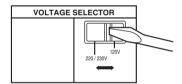
Setting the voltage selector for the receiver and sub woofer

If your receiver and sub woofer has a voltage selector on the rear panel, check that the voltage selector is set to the local power supply voltage. If not, use a screwdriver to set the selector to the correct position before connecting the AC power cord to a wall outlet.

Receiver

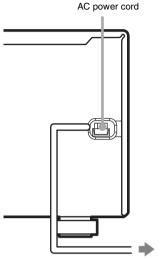


Sub woofer



Connecting the AC power cord

Connect the AC power cord to a wall outlet.



To a wall outlet

Performing initial setup operations

Before using the receiver for the first time, initialize the receiver by performing the following procedure.

This procedure can also be used to return settings you have made to their factory defaults. Use the buttons on the receiver for the operation.

Press I/(1) to turn off the receiver.

2 Hold down I/ \bigcirc for 5 seconds.

"PUSH" and "ENTER" appears in the display alternatingly.

3 Press ENTER.

"CLEARING" appears in the display for a while, then "CLEARED" appears.

The following are reset to their factory.

The following are reset to their factory settings.

- All settings in the SET UP, LEVEL, TONE and CUSTOMIZE menus.
- The sound field memorized for each input and preset station.
- · All sound field parameters.
- · All preset stations.
- All index names for inputs and preset stations.
- MASTER VOLUME –/+ is set to "VOL MIN".

5: Setting up the speakers

You can use the SET UP menu to set the distance and location of the speakers connected to this receiver.

- Press I/U to turn on the receiver.
- Press MAIN MENU repeatedly to select "<SET UP>".
- 3 Press < or > repeatedly to select the parameter you want to adjust.

For details, see "Speaker setup parameters" below.

Note

Some speaker setup items may appear dimmed in the display. This means that they have been adjusted automatically due to other speaker settings or may not be adjustable.

Press + or - repeatedly to select the setting you want.

The setting is entered automatically.

5 Repeat steps 3 and 4 until you have set all of the items that follow.

Speaker setup parameters

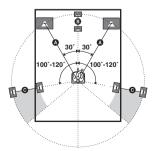
The initial setting is underlined.

■ ☼ 戶 DIST. X.X m (XX ft.) (Front speaker distance)

Initial setting: 3.0 m (10 ft.)

Lets you set the distance from your listening position to the front speakers (A). You can adjust from 1.0 meter to 7.0 meters (3 to 23 feet) in 0.1 meter (1 foot) steps.

If both front speakers are not placed an equal distance from your listening position, set the distance to the closest speaker.



■ ☼ DIST. X.X m (XX ft.) (Center speaker distance)

Initial setting: 3.0 m (10 ft.)

Lets you set the distance from your listening position to the center speaker. Center speaker distance should be set from a distance equal to the front speaker distance (A on page 17) to a distance 1.5 meters (5 feet) closer to your listening position (3 on page 17).

■ DIST. X.X m (XX ft.) (Surround speaker distance)

Initial setting: 3.0 m (10 ft.)

Lets you set the distance from your listening position to the surround speakers. Surround speaker distance should be set from a distance equal to the front speaker distance (**(A)** on page 17) to a distance 4.5 meters (15 feet) closer to your listening position (**(O)** on page 17). If both surround speakers are not placed an equal distance from your listening position, set the distance to the closest speaker.

Tip

The receiver lets you to input the speaker position in terms of distance. However, it is not possible to set the center speaker further than the front speakers. Also, the center speaker cannot be set more than 1.5 meters (5 feet) closer than the front speakers.

Likewise, the surround speakers cannot be set further away from the listening position than the front speakers. And they can be no more than 4.5 meters (15 feet) closer.

This is because incorrect speaker placement is not conducive to the enjoyment of surround sound.

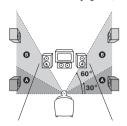
Please note that setting the speaker distance closer.

Please note that, setting the speaker distance closer than the actual location of the speakers will cause a delay in the output of the sound from that speaker. In other words, the speaker will sound like it is further away. For example, setting the center speaker distance 1–2 meters (3–6 feet) closer than the actual speaker position will create a fairly realistic sensation of being "inside" the screen. If you cannot obtain a satisfactory surround effect because the surround speakers are too close, setting the surround speaker distance closer (shorter) than the actual distance will create a larger sound stage.

Adjusting these parameter while listening to the sound often results in much better surround sound. Give it a try!

■ PL. XXXX (Surround speaker placement)

Lets you specify the height of your surround speakers for proper implementation of the surround effects of the Cinema Studio EX modes (page 28).



• LOW

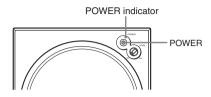
Select if the height of your surround speakers corresponds to section **A**.

• HIGH

Select if the height of your surround speakers corresponds to section $oldsymbol{\mathbb{B}}$.

6: Setting up the sub woofer

Listening to the sub woofer

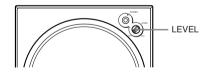


Before playing the program source, set the volume to minimum on the receiver.

- 1 Turn on the receiver.
- Press input buttons (e.g., DVD) to select the program source (e.g., DVD player).
- **3** Press POWER on the sub woofer. The POWER indicator on the sub woofer lights up.
- 4 Play the program source.

Adjusting the level

Slight adjustments to the system can enhance your sound enjoyment.



Turn LEVEL to adjust the volume.

Set the volume level to best suit your preference according to the program source.

Note

Do not set the volume of the sub woofer to maximum. Extraneous noise may be heard.

7: Adjusting the speaker levels and balance

- TEST TONE

Adjust the speaker levels and balance while listening to the test tone from your listening position. Use the remote for the operation.

Tip

The receiver employs a test tone with a frequency centered at 800 Hz.

- 1 Press I/U to turn on the receiver.
- **2** Press TEST TONE.

"T. TONE" appears in the display and the test tone is output from each speaker in sequence.

Front (left) \rightarrow Center \rightarrow Front (right) \rightarrow Surround (right) \rightarrow Surround (left) \rightarrow Sub woofer

Adjust the speaker levels and balance using the LEVEL menu so that the level of the test tone sounds the same from each speaker.

For details on the LEVEL menu settings, see page 30.

Tips

- To adjust the level of all speakers at the same time, press MASTER VOL +/- on the remote or turn MASTER VOLUME -/+ on the receiver.
- The adjusted value are shown in the display during adjustment.
- 4 Press TEST TONE again after adjustment.

The test tone turns off.

Notes

- (Models of area code CEL, CEK only) The test tone cannot be used when MULTI CH IN function is used.
- Although these adjustments can also be made via the front panel using the LEVEL menu (when the test tone is output, the receiver switches to the LEVEL menu automatically), we recommend you follow the procedure described above and adjust the speaker levels from your listening position using the remote.
- The bass redirection circuitry is always active, so you
 may hear some sound output from the sub woofer
 when test tone is output from other speakers.
 However, this is not a malfunction.

Amplifier Operation

Selecting the component

1 Press input buttons to select the input.

To select the	Press
VCR	VIDEO 1
	or VIDEO 2
Satellite tuner	VIDEO 2
DVD player	DVD
MD or tape deck	MD/TAPE
CD player	CD
Built-in tuner (FM/AM)	TUNER FM/AM

The selected input appears in the display.

Turn on the component and start playback.

Note

If you select the VCR or DVD player, set the TV's video input to match the component you selected

3 Turn MASTER VOLUME -/+ to adjust the volume.

Note

To avoid damaging your speakers, make sure that you turn down the volume before you turn off the receiver.

To mute the sound

Press MUTING on the remote.

The muting function will be canceled when you do the following.

- · Press MUTING on the remote again.
- Turn the power off.
- · Increase the volume.

To use the headphones

Connect the headphones to the PHONES jack. When the headphones are connected, speaker output is automatically canceled and "SP" does not light up in the display.

Listening to multi channel sound

- MULTI CH IN

(Models of area code CEL, CEK only)

You can select the audio directly from the components connected to the MULTI CH IN jacks. This enables you to enjoy high quality analog inputs such as DVD. When MULTI CH IN is selected, the tone and sound field cannot be used.

Press MULTI CH IN.

Press again to cancel the MULTI CH IN function.

Note

To optimize the sound balance of this system, we recommend that you set the speaker configuration of your DVD player as follows:

Speaker type	Settings
FRONT	SMALL
CENTER	SMALL
SURROUND/REAR	SMALL
SUB WOOFER	YES

When MULTI CHANNEL DECODING indicator lights up

(Models of area code CEL, CEK only)

The MULTI CHANNEL DECODING indicator lights up when the receiver is decoding multi channel sources.

However, this indicator does not light up if you select 2CH STEREO mode.

Listening to FM/AM radio

You can listen to FM and AM broadcasts through the built-in tuner. Before operation, make sure you have connected the FM and AM antennas to the receiver (see page 13).

Tip

The tuning scale differs depending on the area code as shown in the following table. For details on area codes, see page 3.

Area code	FM	AM
CA	100 kHz	10 kHz*
CEL, CEK, SP, AU	50 kHz	9 kHz
E51	50 kHz	10 kHz

^{*} The AM tuning scale can be changed (see page 48).

Automatic tuning

If you do not know the frequency of the station you want, you can let the receiver scan all available stations in your area.

Press TUNER FM/AM repeatedly to select the FM or AM band.

The last received station is tuned in.

2 Press TUNING + or TUNING -.

Press TUNING + to scan from low to high; press TUNING – to scan from high to low. The receiver stops scanning whenever a station is received

Tip

If "STEREO" flashes in the display and the FM stereo reception is poor, press FM MODE to change to monaural (MONO). You will not be able to enjoy the stereo effect, but the sound will be less distorted. To return to stereo mode, press FM MODE again.

Direct tuning

You can enter the frequency of the station you want directly. Use the remote for the operation.

1 Press TUNER repeatedly to select the FM or AM band.

The last received station is tuned in.

Tip

You can also use TUNER FM/AM on the receiver

2 Press D.TUNING.

3 Press the numeric buttons to enter the frequency.

Example 1: FM 102.50 MHz

Press $1 \rightarrow 0 \rightarrow 2 \rightarrow 5 \rightarrow 0$

Example 2: AM 1,350 kHz

(You do not have to enter the last "0" when the tuning scale is set to 10 kHz.)

Press $1 \Rightarrow 3 \Rightarrow 5 \Rightarrow 0$

If you have tuned in an AM station, adjust the direction of the AM loop antenna for optimum reception.

If you cannot tune in a station and the entered numbers flash

Make sure you have entered the right frequency. If not, repeat steps 2 and 3. If the entered numbers still flash, the frequency is not used in your area.

Storing FM stations automatically

- AUTOBETICAL

(Models of area code CEL, CEK only)

This function lets you store up to 30 FM and FM RDS stations in alphabetical order without redundancy. Additionally, it only stores the stations with the clearest signals.

If you want to store FM or AM stations one by one, see "Presetting radio stations".

Use the buttons on the receiver for the operation.

Press I/(¹) to turn off the receiver.

2 Hold down MEMORY and press I/U to turn the receiver back on.

"AUTO-BETICAL SELECT" appears in the display and the receiver scans and stores all the FM and FM RDS stations in the broadcast area.

For RDS stations, the tuner first checks for stations broadcasting the same program, then stores only the one with the clearest signal. The selected RDS stations are sorted alphabetically by their Program Service name, then assigned a 2-character preset code. For more details on RDS, see page 23.

Regular FM stations are assigned 2-character preset codes and stored after the RDS station.

When done, "FINISH" appears in the display momentarily and the receiver returns to the normal operation.

Notes

- Do not press any button on the receiver or supplied remote during autobetical operation, except I/்.
- If you move to another area, repeat this procedure to store stations in your new area.
- For details on tuning the stored stations, see "Tuning to preset stations".
- If you move the antenna after storing stations with this procedure, the stored settings may no longer be valid. If this happens, repeat this procedure to store the stations again.

Presetting radio stations

You can preset up to 30 FM or AM stations. Then you can easily tune in the stations you often listen to.

Presetting radio stations

1 Press TUNER FM/AM repeatedly to select the FM or AM band.

The last received station is tuned in.

- Tune in the station that you want to preset using Automatic Tuning (page 21) or Direct Tuning (page 21).
- **3** Press MEMORY.

"MEMORY" appears in the display for a few seconds. Do steps 4 to 5 before the display goes out.

4 Press PRESET TUNING + or PRESET TUNING – repeatedly to select a preset station number.

Each time you press the button, you can select the preset station number as follows:

If "MEMORY" goes out before you select the preset station number, start again from step 3.

Tip

You can also use the remote to select a preset station number. Press SHIFT repeatedly to select a memory page (A, B or C) and then press the numeric buttons to select a preset number.

5 Press MEMORY again.

The station is stored to the selected preset

If "MEMORY" goes out before you press MEMORY, start again from step 3.

Repeat steps 2 to 5 to preset another station.

Tuning to preset stations

Press TUNER FM/AM repeatedly to select the FM or AM band.

The last received station is tuned in.

Press PRESET TUNING + or PRESET TUNING - repeatedly to select the preset station you want.

Each time you press the button, you can select the preset station as follows:

$$\rightarrow$$
A1 \leftrightarrow A2 \leftrightarrow ... \leftrightarrow A0 \leftrightarrow B1 \leftrightarrow B2 \leftrightarrow ... \leftrightarrow B0 \leftarrow

Using the remote

- Press TUNER repeatedly to select the FM or AM band.
- 2 Press PRESET/CH/D.SKIP +/- repeatedly to select the preset station you want.

To select the preset station directly

Press the numeric buttons on the remote. The preset station of the selected number in the current memory page is tuned in. Press SHIFT repeatedly on the remote to change the memory page.

Using the Radio Data System (RDS)

(Models of area code CEL, CEK only)

This receiver also allows you to use RDS (Radio Data System), which enables radio stations to send additional information along with the regular program signal. You can also display RDS information.

Notes

- · RDS is operable only for FM stations.
- Not all FM stations provide RDS service, nor do they
 provide the same types of services. If you are not
 familiar with the RDS services in your area, check
 with your local radio stations for details.

Receiving RDS broadcasts

Simply select a station on the FM band using Automatic tuning (page 21), Direct tuning (page 21), or preset tuning (page 23).

When you tune in a station that provides RDS services, the RDS indicator lights up and the program service name appears in the display.

Note

RDS may not work properly if the station you tuned to is not transmitting the RDS signal properly or if the signal strength is weak.

Displaying RDS information

While receiving an RDS station, press DISPLAY repeatedly.

Each time you press the button, RDS information on the display changes cyclically as follows:

Program Service name \rightarrow Frequency \rightarrow Program Type indication^{a)} \rightarrow Radio Text indication^{b)} \rightarrow Current Time indication (in 24-hour system) \rightarrow Sound field currently applied

- a) Type of program being broadcast (see page 24).
- b) Text messages sent by the RDS station.

Notes

- If there is an emergency announcement by government authorities, "ALARM" flashes in the display.
- When the message consists of 9 characters or more, the message scrolls across the display.
- If a station does not provide a particular RDS service, "NO XXXX" (such as "NO TEXT") appears in the display.

Description of program types

NEWS News programs AFFAIRS Topical programs that expand on current news INFO Programs offering information on a wide spectrum of subjects, including consumer affairs and medical advice SPORT Sports programs EDUCATE Educational programs, such as "how-to" and advice programs DRAMA Radio plays and serials CULTURE Programs about national or regional culture, such as language and social concerns SCIENCE Programs about the natural sciences and technology VARIED Other types of programs such as celebrity interviews, panel games, and comedy POP M Popular music programs ROCK M Rock music programs EASY M Easy Listening LIGHT M Instrumental, vocal, and choral music CLASSICS Performances of major orchestras, chamber music, opera, etc. OTHER M Music that does not fit into any categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs for children SOCIAL Programs about people and the things that affect them RELIGION Programs of religious content	Program type indication	Description
CUTTENT NEWS INFO Programs offering information on a wide spectrum of subjects, including consumer affairs and medical advice SPORT Sports programs EDUCATE Educational programs, such as "how-to" and advice programs DRAMA Radio plays and serials CULTURE Programs about national or regional culture, such as language and social concerns SCIENCE Programs about the natural sciences and technology VARIED Other types of programs such as celebrity interviews, panel games, and comedy POP M Popular music programs ROCK M Rock music programs EASY M Easy Listening LIGHT M Instrumental, vocal, and choral music CLASSICS Performances of major orchestras, chamber music, opera, etc. OTHER M Music that does not fit into any categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs about people and the things that affect them	NEWS	News programs
a wide spectrum of subjects, including consumer affairs and medical advice SPORT Sports programs EDUCATE Educational programs, such as "how-to" and advice programs DRAMA Radio plays and serials CULTURE Programs about national or regional culture, such as language and social concerns SCIENCE Programs about the natural sciences and technology VARIED Other types of programs such as celebrity interviews, panel games, and comedy POP M Popular music programs ROCK M Rock music programs EASY M Easy Listening LIGHT M Instrumental, vocal, and choral music CLASSICS Performances of major orchestras, chamber music, opera, etc. OTHER M Music that does not fit into any categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs about people and the things that affect them	AFFAIRS	
EDUCATE Educational programs, such as "how-to" and advice programs DRAMA Radio plays and serials CULTURE Programs about national or regional culture, such as language and social concerns SCIENCE Programs about the natural sciences and technology VARIED Other types of programs such as celebrity interviews, panel games, and comedy POP M Popular music programs ROCK M Rock music programs EASY M Easy Listening LIGHT M Instrumental, vocal, and choral music CLASSICS Performances of major orchestras, chamber music, opera, etc. OTHER M Music that does not fit into any categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs about people and the things that affect them	INFO	a wide spectrum of subjects, including consumer affairs and
"how-to" and advice programs DRAMA Radio plays and serials CULTURE Programs about national or regional culture, such as language and social concerns SCIENCE Programs about the natural sciences and technology VARIED Other types of programs such as celebrity interviews, panel games, and comedy POP M Popular music programs ROCK M Rock music programs EASY M Easy Listening LIGHT M Instrumental, vocal, and choral music CLASSICS Performances of major orchestras, chamber music, opera, etc. OTHER M Music that does not fit into any categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs for children SOCIAL Programs about people and the things that affect them	SPORT	Sports programs
CULTURE Programs about national or regional culture, such as language and social concerns SCIENCE Programs about the natural sciences and technology VARIED Other types of programs such as celebrity interviews, panel games, and comedy POP M Popular music programs ROCK M Rock music programs EASY M Easy Listening LIGHT M Instrumental, vocal, and choral music CLASSICS Performances of major orchestras, chamber music, opera, etc. OTHER M Music that does not fit into any categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs for children SOCIAL Programs about people and the things that affect them	EDUCATE	1 0
regional culture, such as language and social concerns SCIENCE Programs about the natural sciences and technology VARIED Other types of programs such as celebrity interviews, panel games, and comedy POP M Popular music programs ROCK M Rock music programs EASY M Easy Listening LIGHT M Instrumental, vocal, and choral music CLASSICS Performances of major orchestras, chamber music, opera, etc. OTHER M Music that does not fit into any categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs for children SOCIAL Programs about people and the things that affect them	DRAMA	Radio plays and serials
Sciences and technology VARIED Other types of programs such as celebrity interviews, panel games, and comedy POP M Popular music programs ROCK M Rock music programs EASY M Easy Listening LIGHT M Instrumental, vocal, and choral music CLASSICS Performances of major orchestras, chamber music, opera, etc. OTHER M Music that does not fit into any categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs for children SOCIAL Programs about people and the things that affect them	CULTURE	regional culture, such as language
celebrity interviews, panel games, and comedy POP M Popular music programs ROCK M Rock music programs EASY M Easy Listening LIGHT M Instrumental, vocal, and choral music CLASSICS Performances of major orchestras, chamber music, opera, etc. OTHER M Music that does not fit into any categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs for children SOCIAL Programs about people and the things that affect them	SCIENCE	2
ROCK M Rock music programs EASY M Easy Listening LIGHT M Instrumental, vocal, and choral music CLASSICS Performances of major orchestras, chamber music, opera, etc. OTHER M Music that does not fit into any categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs for children SOCIAL Programs about people and the things that affect them	VARIED	celebrity interviews, panel games,
EASY M Easy Listening LIGHT M Instrumental, vocal, and choral music CLASSICS Performances of major orchestras, chamber music, opera, etc. OTHER M Music that does not fit into any categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs for children SOCIAL Programs about people and the things that affect them	POP M	Popular music programs
LIGHT M Instrumental, vocal, and choral music CLASSICS Performances of major orchestras, chamber music, opera, etc. OTHER M Music that does not fit into any categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs for children SOCIAL Programs about people and the things that affect them	ROCK M	Rock music programs
music CLASSICS Performances of major orchestras, chamber music, opera, etc. OTHER M Music that does not fit into any categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs for children SOCIAL Programs about people and the things that affect them	EASY M	Easy Listening
chamber music, opera, etc. OTHER M Music that does not fit into any categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs for children SOCIAL Programs about people and the things that affect them	LIGHT M	
categories above, such as Rhythm & Blues and Reggae WEATHER Weather information FINANCE Stock market reports and trading, etc. CHILDREN Programs for children SOCIAL Programs about people and the things that affect them	CLASSICS	
FINANCE Stock market reports and trading, etc. CHILDREN Programs for children SOCIAL Programs about people and the things that affect them	OTHER M	categories above, such as Rhythm
etc. CHILDREN Programs for children SOCIAL Programs about people and the things that affect them	WEATHER	Weather information
SOCIAL Programs about people and the things that affect them	FINANCE	•
things that affect them	CHILDREN	Programs for children
RELIGION Programs of religious content	SOCIAL	
	RELIGION	Programs of religious content

Program type indication	Description
PHONE IN	Programs where members of the public express their views by phone or in a public forum
TRAVEL	Programs about travel. Not for announcements that are located by TP/TA
LEISURE	Programs on recreational activities such as gardening, fishing, cooking, etc.
JAZZ	Jazz programs
COUNTRY	Country music programs
NATION M	Programs featuring the popular music of the country or region
OLDIES	Programs featuring oldies music
FOLK M	Folk music programs
DOCUMENT	Investigative features
NONE	Any programs not defined above

Changing the display

Changing the information in the display

You can check the sound field etc. by changing the information in the display.

Press DISPLAY repeatedly.

Each time you press DISPLAY, the display will change cyclically as follows.

Index name of the input ^{*} → Selected input → Sound field currently applied

When the tuner is selected

Program Service name** or preset station name*

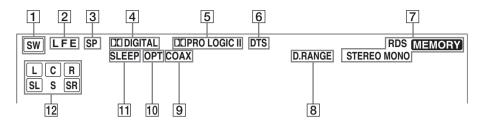
- → Frequency → Program Type indication**
- → Radio Text indication ** → Current Time indication (in 24-hour system) ** → Sound field currently applied
- * Index name appears only when you have assigned one to the input or preset station (page 34). Index name does not appear when only blank spaces have been entered, or it is the same as the input name.
- ** During RDS reception only. (Models of area code CEL, CEK only. See page 23).

Adjusting the brightness of the display

Press DIMMER repeatedly.

The brightness of the display will change in 3 steps.

About the indications in the display



- **SW:** Lights up when the audio signal is output from the SUB WOOFER jack.
- 2 LFE: Lights up when the disc being played back contains the LFE (Low Frequency Effect) channel and the LFE channel signal is actually being reproduced.
- 3 SP: Lights up when you turn on the receiver. Turns off when you connect headphones to the PHONES jack.
- [4] DCI DIGITAL: Lights up when the receiver is decoding signals recorded in the Dolby Digital format.
- 5 DI PRO LOGIC II: "DI PRO LOGIC" lights up when the receiver applies Pro Logic processing to 2 channel signals in order to output the center and surround channel signals. "DI PRO LOGIC II" lights up when the Pro Logic II Movie/Music decoder is activated.

Note

Dolby Pro Logic and Dolby Pro Logic II decoding do not function for DTS format signals.

6 DTS: Lights up when DTS signals are input.

Note

When playing a DTS format disc, be sure that you have made digital connections and that INPUT MODE is not set to "ANALOG" (page 30).

7 Tuner indicators: Lights up when using the receiver to tune in radio stations, etc. See pages 21–24 for tuner operations.

Note

"RDS" appears for models of area code CEL, CEK only.

8 **D.RANGE:** Lights up when dynamic range compression is activated (page 31).

- COAX: Lights up when the source signal is a digital signal being input through the COAXIAL terminal.
- 10 **OPT:** Lights up when the source signal is a digital signal being input through the OPTICAL terminal.
- **SLEEP:** Lights up when sleep timer is activated.
- 12 Playback channel indicators: The letters (L, C, R, etc.) indicate the channels being played back. The boxes around the letters vary to show how the receiver downmixes the source sound.

L (Front Left), R (Front Right), C (Center (monaural)), SL (Surround Left), SR (Surround Right), S (Surround (monaural or the surround components obtained by Pro Logic processing))

Example:

Recording format (Front /Surround): 3/2 Sound Field: A.F.D. AUTO



Enjoying Surround Sound

Using only the front speakers and sub woofer

- 2CH STEREO

In this mode, the receiver outputs the sound from the front left/right speakers and sub woofer only.

When multi channel surround formats are input, the signals are downmixed to 2 channel with bass frequencies being output from the sub woofer.

When standard 2 channel stereo sources are input, the receiver's bass redirection circuitry will be activated. The front channel bass frequencies will be output from the sub woofer.

Press 2CH.

"2CH ST." appears in the display and the receiver switches to the 2CH STEREO mode.

Enjoying higher fidelity sound

- AUTO FORMAT DIRECT

The Auto Format Direct (A.F.D.) mode allows you to select the decoding mode you want for your audio sound.

A.F.D. mode (Display)	Decoding mode
A.F.D. AUTO	As encoded
(A.F.D. AUTO)	
PRO LOGIC	Dolby Pro Logic
(DOLBY PL)	
PRO LOGIC II MOVIE	Dolby Pro Logic II
(PLII MOV)	
PRO LOGIC II MUSIC	_
(PLII MUS)	

Decoding the input audio signal automatically

In this mode, the receiver automatically detects the type of audio signal being input (Dolby Digital, DTS, standard 2 channel stereo, etc.) and performs the proper decoding if necessary. This mode presents the sound as it was recorded/encoded, without adding any surround effects. However, if there are no low frequency signals (Dolby Digital LFE, etc.) it will generate a low frequency signal for output to the sub woofer.

Press A.F.D. repeatedly to select "A.F.D. AUTO".

The receiver automatically detects the type of audio signal being input and performs the proper decoding if necessary.

Enjoying stereo sound in multi channel (2 channel decoding mode)

This mode lets you specify the type of decoding for 2 channel audio sources. This receiver can reproduce 2 channel sound in 5 channels through Dolby Pro Logic II or 4 channels through Dolby Pro Logic.

Press A.F.D. repeatedly to select the 2 channel decoding mode.

The selected type of decoding appears in the display.

■ DOLBY PL (PRO LOGIC)

Performs Dolby Pro Logic decoding. The source recorded in 2 channel is decoded into 4.1 channels.

■ PLII MOV (PRO LOGIC II MOVIE)

Performs Dolby Pro Logic II Movie mode decoding. This setting is ideal for movies encoded in Dolby Surround. In addition, this mode can reproduce sound in 5.1 channel when watching videos of overdubbed or old movies.

■ PLII MUS (PRO LOGIC II MUSIC)

Performs Dolby Pro Logic II Music mode decoding. This setting is ideal for normal stereo sources such as CDs.

Note

Dolby Pro Logic and Dolby Pro Logic II decoding do not function for DTS format signals.

Selecting a sound field

You can take advantage of surround sound simply by selecting one of the receiver's preprogrammed sound fields. They bring the exciting and powerful sound of movie theaters and concert halls into your home.

Selecting a sound field for movies

Press MOVIE repeatedly to select the sound field you want.

The selected sound field appears in the display.

Sound field	Display
CINEMA STUDIO EX A DCS	C.ST.EX A
CINEMA STUDIO EX B DCS	C.ST.EX B
CINEMA STUDIO EX C DCS	C.ST.EX C

About DCS (Digital Cinema Sound)

Sound fields with **DCS** marks use DCS technology.

DCS is the concept name of the surround technology for home theater developed by Sony. DCS uses the DSP (Digital Signal Processor) technology to reproduce the sound characteristics of an actual cinema cutting studio in Hollywood.

When played at home, DCS will create a powerful theater effect that mimics the artistic combination of sound and action as envisioned by the movie director.

■ C.ST.EX A (CINEMA STUDIO EX A) DCS

Reproduces the sound characteristics of the Sony Pictures Entertainment "Cary Grant Theater" cinema production studio. This is a standard mode, great for watching most any type of movies.

■ C.ST.EX B (CINEMA STUDIO EX B) DCS

Reproduces the sound characteristics of the Sony Pictures Entertainment "Kim Novak Theater" cinema production studio. This mode is ideal for watching science-fiction or action movies with lots of sound effects.

■ C.ST.EX C (CINEMA STUDIO EX C) DCS

Reproduces the sound characteristics of the Sony Pictures Entertainment scoring stage. This mode is ideal for watching musicals or films where orchestra music is featured in the soundtrack.

About CINEMA STUDIO EX modes

CINEMA STUDIO EX modes are suitable for watching motion picture DVDs (etc.), with multi channel surround effects. You can reproduce the sound characteristics of Sony Pictures Entertainment's dubbing studio in your home

The CINEMA STUDIO EX modes consist of the following three elements.

- Virtual Multi Dimension
 Creates 5 sets of virtual speakers from a single pair of actual surround speakers.
- Screen Depth Matching
 Creates the sensation that the sound is coming
 from inside the screen like in theaters.
- Cinema Studio Reverberation
 Reproduces the type of reverberation found in theaters.

The CINEMA STUDIO EX modes integrate these three elements simultaneously.

Notes

- The effects provided by the virtual speakers may cause increased noise in the playback signal.
- When listening with sound fields that employ the virtual speakers, you will not be able to hear any sound coming directly from the surround speakers.

Selecting a sound field for music

Press MUSIC repeatedly to select the sound field you want.

The selected sound field appears in the display.

Sound field	Display
HALL	HALL
JAZZ CLUB	JAZZ
LIVE CONCERT	CONCERT

■ HALL

Reproduces the acoustics of a classical concert hall.

■ JAZZ (JAZZ CLUB)

Reproduces the acoustics of a jazz club.

■ CONCERT (LIVE CONCERT)

Reproduces the acoustics of a 300-seat live house.

To turn off the surround effect

Press 2CH to select "2CH ST." or press A.F.D. repeatedly to select "A.F.D. AUTO".

Tips

- The receiver lets you apply the last selected sound field to an input whenever it is selected (Sound Field Link). For example, if you select HALL for the CD input, then change to a different input and then return to CD, HALL will automatically be applied again.
- You can identify the encoding format of DVD software, etc. by looking at the logo on the package.
 - Dolby Digital discs
 - Dolby Surround encoded programs:
 - Its: : DTS Digital Surround encoded programs

Note

Sound fields do not function for the signals with a sampling frequency of more than 48 kHz.

Advanced Adjustments and Settings

Switching the audio input mode for digital components

— INPUT MODE

You can switch the audio input mode for components which have digital audio input jacks.

1 Press input buttons to select the input.

Press INPUT MODE repeatedly to select the audio input mode.

The selected audio input mode appears in the display.

Audio input modes

AUTO IN

Gives priority to digital signals when there are both digital and analog connections. If there are no digital signals, analog is selected.

- COAX IN
 Specifies the digital audio signals input to the DIGITAL COAXIAL input jack.
- OPT IN Specifies the digital audio signals input to the DIGITAL OPTICAL input jacks.
- ANALOG
 Specifies the analog audio signals input to the AUDIO IN (L/R) jacks.

Note

When signals with a sampling frequency of more than 48 kHz is input, the tone and sound field cannot be used.

Customizing sound fields

By adjusting the LEVEL menu, you can customize the sound fields to suit your particular listening situation.

Note on the displayed items

The setup items you can adjust in each menu vary depending on the sound field. Certain setup parameters may be dimmed in the display. This means that the selected parameter is either unavailable or fixed and unchangeable.

Adjusting the LEVEL menu

You can adjust the balance and level of each speaker. These settings are applied to all sound fields except for the effect level parameter. The effect level parameter settings are stored individually for each sound field.

- Start playing a source encoded with multi channel surround effects (DVD, etc.).
- Press MAIN MENU repeatedly to select "<LEVEL>".
- 3 Press < or > repeatedly to select the parameter you want to adjust.

For details, see "LEVEL menu parameters" below

While monitoring the sound, press + or - repeatedly to select the setting you want.

The setting is entered automatically.

Repeat steps 3 and 4 to adjust the other parameters.

LEVEL menu parameters

The initial setting is underlined.

■ 遠 題 BAL. L/R XX (Front speaker balance)

Initial setting: BALANCE (0)

Lets you adjust the balance between front left and right speakers. You can adjust in the range of BAL. L (+1 to +8), BALANCE (0), BAL. R (+1 to +8) in 17 steps.

- CTR XXX dB (Center speaker level)
- SUR.L. XXX dB (Surround speaker (left) level)
- SUR.R. XXX dB (Surround speaker (right) level)
- S.W. XXX dB (Sub woofer level)

Initial setting: 0 dB

You can adjust from -10 dB to +10 dB in 1 dB steps.

(Dynamic range compressor)

Lets you compress the dynamic range of the sound track. This may be useful when you want to watch movies at low volumes late at night.

OFF

The dynamic range is not compressed.

• STE

The dynamic range is compressed as intended by the recording engineer.

• MAX

The dynamic range is compressed dramatically.

Tip

Dynamic range compressor lets you compress the dynamic range of the soundtrack based on the dynamic range information included in the Dolby Digital signal. We recommend using the "MAX" setting. This greatly compresses the dynamic range and lets you view movies late at night at low volumes. Unlike analog limiters, the levels are predetermined and provide a very natural compression.

Note

Dynamic range compression is possible with Dolby Digital sources only.

■ EFCT. XXX (Effect level)

Initial setting: STD

Lets you adjust the "presence" of the surround effect.

Resetting sound fields to the initial settings

Use the buttons on the receiver for the operation.

- 1 Press I/U to turn off the power.
- While holding down 2CH, press $I/(^{l})$.

"SF. CLR." appears in the display and all sound fields are reset to the initial setting.

Adjusting the tone

You can adjust the tonal quality (bass, treble level) of the front speaker using the TONE menu.

- Start playing a source encoded with multi channel surround effects (DVD, etc.).
- Press MAIN MENU repeatedly to select "<TONE>".
- 3 Press < or > repeatedly to select the parameter you want to adjust.

For details, see "TONE menu parameters" below

While monitoring the sound, press + or - repeatedly to select the setting you want.

The setting is entered automatically.

5 Repeat steps 3 and 4 to adjust the other items.

Note

You cannot adjust the tone when the receiver is decoding signals with a sampling frequency of more than 48 kHz.

TONE menu parameters

- BASS XX dB (Front speaker bass level)
- TREB. XX dB (Front speaker treble level)

Initial setting: 0 dB

You can adjust from -6 dB to +6 dB in 1 dB steps.

Advanced settings

Using the CUSTOMIZE menu to adjust the receiver

You can adjust various receiver settings using the CUSTOMIZE menu.

- 1 Press MAIN MENU repeatedly to select "<CUSTOM>".
- 2 Press < or > repeatedly to select the parameter you want to adjust.

For details, see "CUSTOMIZE menu parameters" below.

3 Press + or – repeatedly to select the setting you want.

The setting is entered automatically.

4 Repeat steps 2 and 3 to adjust the other items.

CUSTOMIZE menu parameters

The initial setting is underlined.

■ DEC. XXXX (Digital audio input decoding priority)

Lets you specify the input mode for the digital signal input to the DIGITAL IN jacks.

The initial setting is "DEC. AUTO" for VIDEO 2 and "DEC. PCM" for DVD.

• AUTO

Automatically switches the input mode between DTS, Dolby Digital, or PCM.

• PCM

PCM signals are given priority (to prevent the interruption when playback starts). Even when other signals are input, the sound is output. However, this receiver cannot decode DTS-CD when set to "DEC. PCM".

Note

When set to "DEC. AUTO" and the sound from the digital audio jacks (for CD, etc.) is interrupted when playback starts, set to "DEC. PCM".

■ DUAL XXX

(Digital broadcast language selection)

Lets you select the language you want to listen to during digital broadcast. This feature only functions for Dolby Digital sources.

• M/S (Main/Sub)

Sound of the main language will be output through the front left speaker and sound of the sub language will be output through the front right speaker simultaneously.

• M (Main)

Sound of the main language will be output.

• S (Sub)

Sound of the sub language will be output.

• M+S (Main + Sub)

Mixed sound of both the main and sub languages will be output.

■ NAME IN

(Naming preset stations and inputs)

Lets you set the name of preset stations and inputs selected with input buttons. For details, see "Naming preset stations and inputs" on page 34.

Other Operations

Naming preset stations and inputs

You can enter a name of up to 8 characters for preset stations and inputs selected with input buttons, and display it in the receiver's display.

1 To index a preset station

Press TUNER FM/AM repeatedly to select the FM or AM band, then tune in the preset station you want to create an index name for (page 23).

To index an input

Press the input button to select the input you want to create an index name for.

- Press MAIN MENU repeatedly to select "<CUSTOM>".
- **3** Press < or > repeatedly to select "NAME IN".
- 4 Press ENTER.

The cursor flashes and you can select a character.

5 Use < or > and + or - to create an index name.

Press + or – repeatedly to select a character, then press > to move the cursor to the next position.

Tips

- You can select the character type as follows by pressing + or – repeatedly.
 - Alphabet (upper case) → Numbers → Symbols
- To enter a blank space, press + or repeatedly until a blank space appears in the display.
- If you made a mistake, press < or > repeatedly until the character you want to change flashes, then press + or - repeatedly to select the correct character.
- 6 Press ENTER to store the index name.

Note (Models of area code CEL, CEK only)

When you name an RDS station and tune in the station, the Program Service name appears instead of the name you entered. (You cannot change the name of a Program Service name. The name you entered will be overwritten by the Program Service name.)

Using the Sleep Timer

You can set the receiver to turn off automatically at a specified time. Use the remote for the operation.

- 1 Press ALT to light up the button.
- Press SLEEP while the power is on.
 Each time you press SLEEP, the display

changes cyclically as follows:

$$2-00-00 \rightarrow 1-30-00 \rightarrow 1-00-00 \rightarrow 0-30-00 \rightarrow OFF$$

While using Sleep Timer, "SLEEP" lights up in the display.

Tip

To check the remaining time before the receiver turns off, press ALT to light up the button (page 38), then press SLEEP. The remaining time appears in the display. If you press SLEEP again, the sleep timer will be canceled.

Recording

Before you begin, make sure you have connected all components properly.

Recording on an audio tape or MiniDisc

You can record on a cassette tape or MiniDisc using the receiver. See the operating instructions of your cassette deck or MD deck if you need help.

- 1 Select the component to be recorded.
- **2** Prepare the component for playing. For example, insert a CD into the CD player.
- Insert a blank tape or MD into the recording deck and adjust the recording level, if necessary.
- 4 Start recording on the recording deck, then start playback on the playback component.

Notes

- Sound adjustments do not affect the signal output from the MD/TAPE OUT jacks.
- The analog audio signals of the current input is output from the MD/TAPE OUT jacks.
- (Models of area code CEL, CEK only) The signals input to the MULTI CH IN jacks are not output from the MD/TAPE OUT jacks even when MULTI CH IN is being used. The analog audio signals of the current or previously used input are output.

Recording on a video tape

You can record from a VCR, a TV or a DVD using the receiver. You can also add audio from a variety of audio sources when editing a video tape. See the operating instructions of your VCR or DVD player if you need help.

- Select the program source to be recorded.
- Prepare the component for playing.

 For example, insert a video tape you want to record into VCR.
- 3 Insert a blank video tape into the VCR (VIDEO 1) for recording.
- 4 Start recording on the recording VCR, then start playing the video tape or DVD you want to record.

Tip

You can record the sound from any audio source onto a video tape while copying from a video tape or DVD. Locate the point where you want to start recording from another audio source, select the program source, then start playback. The audio from that source will be recorded onto the audio track of the video tape instead of the audio from the original medium. To resume audio recording from the original medium, select the video source again.

Notes

- You cannot record a digital audio signal using a component connected to the analog VIDEO 1 OUT iacks.
- Make sure to make both digital and analog connections to the VIDEO 2 and DVD inputs.
 Analog recording is not possible if you make only digital connections.
- The analog audio signals of the current input are output from the VIDEO 1 OUT jacks.
- (Models of area code CEL, CEK only) The signals input to the MULTI CH IN jacks are not output from VIDEO 1 OUT jacks even when MULTI CH IN is being used. The analog audio signals of the current or previously used input are output.

Operations Using the Remote RM-PP760

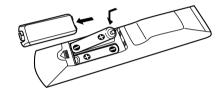
You can use the remote RM-PP760 to operate the components in your system.

Before you use your remote

Inserting batteries into the remote

Insert R6 (size-AA) batteries with the + and − properly oriented in the battery compartment. When using the remote, point it at the remote sensor

note on the receiver.



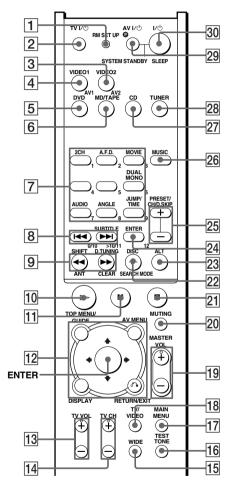
Tip

Under normal conditions, the batteries should last for about 6 months. When the remote no longer operates the receiver, replace all batteries with new ones.

Notes

- Do not leave the remote in an extremely hot or humid place.
- · Do not use a new battery with an old one.
- Do not expose the remote sensor to direct sunlight or lighting apparatuses. Doing so may cause a malfunction.
- If you don't use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Remote button description



The tables below show the settings of each button.

Remote Button	Operations	Function
A.F.D. 7	Receiver	Selects the decoding mode for audio sound.

Remote Button	Operations	Function
ALT 23	Remote	When ALT button lights up, it changes the remote key function to activate those buttons with orange printing.
ANGLE 7	DVD player	Selects viewing angle or changes the angles.
ANT 9	VCR	Selects output signal from the antenna terminal: TV signal or VCR program.
AUDIO 7	TV/VCR/ DVD player	Changes the sound to Multiplex, Bilingual or Multi channel TV Sound.
AV MENU 12	VCR/ Satellite tuner/ DVD player	Displays menu.
AV1 4 and AV2 3	Remote	Select the command mode of the remote.
AV I/U 29	TV/VCR/ CD player/ VCD player/ LD player/ DVD player/ MD deck/ DAT deck	Turns the audio and video components on or off.
CD 27	Receiver	To listen to compact disc.
CLEAR 9	DVD player	Press if you make a mistake when you press the numeric button or press to return to continuous play etc.
DISC 22	CD player/ VCD player	Selects a disc directly (multi-disc changer only).
DISPLAY 12	TV/VCR/ VCD player/ LD player/ DVD player	Selects information displayed on the TV screen.
D.TUNING 9	Receiver	Enters direct tuning mode.
DUAL MONO 7	Receiver	Selects the language you want during digital broadcast.
DVD 5	Receiver	To watch DVD.

Remote Button	Operations	Function
ENTER 24	TV/VCR/ Satellite tuner/ LD player/ MD deck/ DAT deck/ Tape deck	After selecting a channel, disc or track using the numeric buttons, press to enter the value.
ENTER 12	VCR/ Satellite tuner/ DVD player	Enters the selection.
JUMP/ TIME 7	CD player/ VCD player/ DVD player	Shows the time or displays the playing time of disc, etc.
MAIN MENU 17	Receiver	Selects the menu of the receiver.
MASTER VOL +/- 19	Receiver	Adjusts the master volume of the receiver.
MD/TAPE	Receiver	To listen to Minidisc or audio tape.
MOVIE 7	Receiver	Selects the pre- programmed sound fields for movie.
MUSIC 26	Receiver	Selects the pre- programmed sound fields for music.
MUTING 20	Receiver	Mutes the sound from the receiver.
PRESET/ CH/	Receiver	Selects preset stations.
D.SKIP +/- 25	TV/VCR/ Satellite tuner	Selects preset channels.
	CD player/ VCD player/ DVD player/ MD deck	Skips discs (multi-disc changer only).
RETURN/ EXIT 12	VCD player/ LD player/ DVD player	Returns to the previous menu.
	Satellite tuner	Exits the menu.
RM SET UP 1	Remote	To set up the remote.
SEARCH MODE 22	DVD player	Selects searching mode. Press to select the unit for search (track, index, etc.)
SHIFT 9	Receiver	Selects a memory page for presetting radio stations or tuning to preset stations.

Remote Button	Operations	Function
SLEEP 30	Receiver	Activates the sleep function and the duration which the receiver turns off automatically.
SUBTITLE 8	DVD player	Changes the subtitles.
SYSTEM	Receiver/TV/	Turns off the receiver
STANDBY	VCR/Satellite	and other Sony audio/
(Press AV	tuner/	video components.
1/ (29 and	CD player/	1
1/ (30 at	VCD player/	
the same	LD player/	
time)	DVD player/	
,	MD deck/	
	DAT deck	
TEST TONE 16	Receiver	Outputs test tone.
TOP MENU/	DVD player	Displays DVD title.
GUIDE 12	Satellite tuner	Displays guide menu.
TUNER 28	Receiver	To listen to radio programs.
TV CH +/-	TV	Selects preset TV channels.
TV/VIDEO	TV	Selects input signal: TV input or video
		input.
TV VOL +/-	TV	Adjusts the volume of the TV.
TV I/🖰 🙎	TV	Turns the TV on or off.
VIDEO1 4	Receiver	To watch VCR. (VTR mode 3)
VIDEO2 3	Receiver	To watch VCR. (VTR mode 1)
WIDE 15	TV	Selects the wide picture mode.
I/Ů 30	Receiver	Turns the receiver on or off.
2CH 7	Receiver	Selects 2CH STEREO mode.

Remote Button	Operations	Function
	ъ .	G 1
↑/ ▼ 12	Receiver	Selects a menu item.
←/→ 12	Receiver	Adjusts or changes the setting.
↑/+/+/→ 12	VCR/ Satellite tuner/ DVD player	Selects a menu item.
1-9 7 and 0/10 8	Receiver	Use with SHIFT to preset radio station or tuning to preset stations and with D.TUNING for direct tuning.
	CD player/ VCD player/ LD player/ MD deck/ DAT deck	Selects track numbers. 0/10 selects track 10.
	TV/VCR/ Satellite tuner	Selects channel numbers.
>10/11 8	CD player/ VCD player/ LD player/ MD deck	Selects track numbers over 10.
8	VCR/ CD player/ VCD player/ LD player/ DVD player/ MD deck/ DAT deck/ Tape deck	Skips tracks.
◄/▶▶ 9	CD player/ VCD player/ LD player/ DVD player/ MD deck	Searches tracks in the forward or backward direction.
	VCR/ DAT deck/ Tape deck	Fastforwards or rewinds.

Remote Button	Operations	Function
□ 10	VCR/ CD player/ VCD player/ LD player/ DVD player/ MD deck/ DAT deck/	Starts playback.
11 11	Tape deck VCR/ CD player/ VCD player/ LD player/ DVD player/ MD deck/ DAT deck/ Tape deck	Pauses playback or record. (Also starts recording with components in recording standby.)
■ 21	VCR/ CD player/ VCD player/ LD player/ DVD player/ MD deck/ DAT deck/ Tape deck	Stops playback.
<i>₹</i> 12	VCD player/ LD player/ DVD player	Returns to the previous menu or exits the menu.
-/ 22	TV	Selects the channel entry mode, either one or two digit.

Notes

- Some functions explained in this section may not work depending on the model.
- The above explanation is intended to serve as an example only. Therefore, depending on the component the above operation may not be possible or may operate differently than described.
- When you press input buttons (VIDEO1, VIDEO2 or DVD), the input mode of the TV might not switch to the corresponding input mode that you want. In this case, press TV/VIDEO button to switch the input mode of the TV.
- To activate the buttons with orange printing, press ALT first before pressing the buttons.

Selecting the command mode of the remote

Set the remote command mode using the RM SET UP button and the remote command mode buttons.

Selecting the command mode

You can switch the command mode (AV1 and AV2) of the remote. If the command mode of the receiver and the remote is different, you cannot use the remote to operate the receiver.

Press AV1 or AV2 while holding down RM SET UP.

The indicator flashes once (twice for AV2), then the command mode switches.

To check the command mode of the remote

Press RM SET UP. You can check the remote by the indicator.

Mode	Indicator flashes
AV1	once
AV2	twice

To reset the remote to factory settings

Press I/ \bigcirc , AV I/ \bigcirc and MASTER VOL – at the same time.

The indicator flashes 3 times, then goes off.

Note

If the command mode of the receiver and the remote is different, you cannot use the remote to operate the receiver. To change the command mode of the receiver, see page 46.

Programming the remote

You can program the remote to control non-Sony components by changing the code. Once the control signals have been memorized, you can use those components as part of your system.

Furthermore, you can also program the remote for Sony components that the remote is unable to control. Note that the remote can only control components that accept infrared wireless control signals.

1 Press AV I/ while holding down RM SET UP.

The indicator lights up.

2 Press the input button (including TV I/்) for the component you want to control.

For example, if you are going to control a CD player, press CD.

Press the numeric buttons to enter the numeric code (or one of the codes if more than one code exists) corresponding to the component and the maker of the component you want to control.

See the tables on pages 42–43 for information on the numeric code(s) corresponding to the component and the maker of the component (the first digit and the last two digits of the numeric code correspond to the category and the maker's code respectively).

4 Press ENTER.

Once the numeric code has been verified, the indicator slowly flashes twice and the remote automatically exits the programming mode.

5 Repeat steps 1 to 4 to control other components.

To cancel programming

Press RM SET UP during any step. The remote automatically exits the programming mode.

To activate the input after programming

Press the programmed button to activate the input you want.

If programming is unsuccessful, check the following:

- If the indicator does not light up in step 1, the batteries are weak. Replace both batteries.
- If the indicator flashes 4 times in quick succession while entering the numeric code, an error has occurred. Start again from step 1.

Notes

- The indicator turns off while a valid button is pressed.
- In step 2, if several input buttons are pressed, only the last pressed button is valid.
- In step 2, if you press TV I/⁽¹⁾, only TV VOL +/-, TV CH +/-, TV/VIDEO and WIDE buttons are reprogrammed.
- In step 3, if an input button is pressed, the new input is selected and the programming procedure returns to the beginning of step 3.
- For the numeric codes, only the first three numbers entered are valid.

To clear the memory of the remote

To clear all programmed signals, do the following to reset the remote to factory settings.

Press I/ \bigcirc , AV I/ \bigcirc and MASTER VOL – at the same time.

The indicator flashes 3 times, then goes off.

The numeric codes corresponding to the component and the maker of the component

Use the numeric codes in the tables below to control non-Sony components and also Sony components that the remote is normally unable to control. Since the remote signal that a component accepts differs depending on the model and year of the component, more than one numeric code may be assigned to a component. If you fail to program your remote using one of the codes, try using other codes.

Notes

- The numeric codes are based on the latest information available for each brand. There is a chance, however, that your component will not respond to some or all of the codes.
- All of the input buttons on this remote may not be available when used with your particular component.

To control a CD player

Maker	Code(s)
SONY	101, 102, 103
DENON	104, 123
JVC	105, 106, 107
KENWOOD	108, 109, 110
MAGNAVOX	111, 116
MARANTZ	116
ONKYO	112, 113, 114
PANASONIC	115
PHILIPS	116
PIONEER	117
TECHNICS	115, 118, 119
YAMAHA	120, 121, 122

To control a DAT deck

Maker	Code(s)
SONY	203
PIONEER	219

To control an MD deck

Maker	Code(s)
SONY	301
DENON	302
JVC	303
KENWOOD	304

To control a tape deck

Maker	Code(s)
SONY	201, 202
DENON	204, 205
KENWOOD	206, 207, 208, 209
NAKAMICHI	210
PANASONIC	216
PHILIPS	211, 212
PIONEER	213, 214
TECHNICS	215, 216
YAMAHA	217, 218

To control an LD player

Maker	Code(s)
SONY	601, 602, 603
PIONEER	606

To control a video CD player

Maker	Code(s)
SONY	605

To control a VCR

Maker	Code(s)
SONY	701, 702, 703, 704, 705, 706
AIWA*	710, 750, 757, 758
AKAI	707, 708, 709, 759
BLAUPUNKT	740
EMERSON	711, 712, 713, 714, 715, 716, 750
FISHER	717, 718, 719, 720
GENERAL ELECTRIC	721, 722, 730
GOLDSTAR	723, 753
GRUNDIG	724
HITACHI	722, 725, 729, 741
ITT/NOKIA	717
JVC	726, 727, 728, 736
MAGNAVOX	730, 731, 738
MITSUBISHI/MGA	732, 733, 734, 735
NEC	736
PANASONIC	729, 730, 737, 738, 739, 740
PHILIPS	729, 730, 731
PIONEER	729
RCA/PROSCAN	722, 729, 730, 731, 741, 747
SAMSUNG	742, 743, 744, 745
SANYO	717, 720, 746
SHARP	748, 749
TELEFUNKEN	751, 752
TOSHIBA	747, 755, 756
ZENITH	754

^{*} If an AIWA VCR does not work even though you enter the code for AIWA, enter the code for Sony instead.

To control a DVD player

Maker	Code(s)
SONY	401, 402, 403
PANASONIC	406, 408
PHILIPS	407
PIONEER	409
TOSHIBA	404
DENON	405

To control a TV

Maker	Code(s)
SONY	501, 502
DAEWOO	504, 505, 506, 507, 515,
	544
FISHER	508
GOLDSTAR	503, 511, 512, 515, 534,
	544
GRUNDIG	517, 534
HITACHI	513, 514, 515, 544
ITT/NOKIA	521, 522
JVC	516
MAGNAVOX	503, 518, 544
MITSUBISHI/MGA	503, 519, 544
NEC	503, 520, 544
PANASONIC	509, 524
PHILIPS	515, 518
PIONEER	509, 525, 526, 540
RCA/PROSCAN	510, 527, 528, 529, 544
SAMSUNG	503, 515, 531, 532, 533,
	534, 544
SANYO	508, 545, 546, 547
SHARP	535
TELEFUNKEN	523, 536, 537, 538
THOMSON	530, 537, 539
TOSHIBA	535, 540, 541
ZENITH	542, 543

To control a satellite tuner or cable box

Maker	Code(s)
SONY	801, 802, 803, 804
JERROLD/G.I.	806, 807, 808, 809, 810, 811, 812, 813, 814
PANASONIC	818
RCA	805, 819
S. ATLANTA	815, 816, 817

To control a tuner

Maker	Code(s)
SONY	002, 003, 004, 005

Additional Information

Precautions

On safety

Should any solid object or liquid fall into the cabinet, unplug the receiver and have it checked by qualified personnel before operating it any further.

On power sources

- Before operating the receiver, check that the operating voltage is identical with your local power supply. The operating voltage is indicated on the nameplate at the rear of the receiver.
- The receiver is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the receiver itself has been turned off.
- If you are not going to use the receiver for a long time, be sure to disconnect the receiver from the wall outlet. To disconnect the AC power cord, grasp the plug itself; never pull the cord.
- (Models of area code CA only)
 One blade of the plug is wider than the other for the purpose of safety and will fit into the wall outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- AC power cord must be changed only at the qualified service shop.

On heat buildup

Although the receiver heats up during operation, this is not a malfunction. If you continuously use this receiver at a large volume, the cabinet temperature of the top, side and bottom rises considerably. To avoid burning yourself, do not touch the cabinet.

On placement

- Place the receiver in a location with adequate ventilation to prevent heat buildup and prolong the life of the receiver.
- Do not place the receiver near heat sources, or in a place subject to direct sunlight, excessive dust or mechanical shock.
- Do not place anything on top of the cabinet that might block the ventilation holes and cause malfunctions.
- Use caution when placing the receiver or speakers on surfaces that have been specially treated (with wax, oil, polish, etc.) as staining or discoloration of the surface may result.

On operation

Before connecting other components, be sure to turn off and unplug the receiver.

If you encounter color irregularity on a nearby TV screen

The front and center speakers and the sub woofer are magnetically shielded to allow it to be installed near a TV set. However, color irregularities may still be observed on certain types of TV sets. As the surround speakers are not magnetically shielded, we recommend that you place the surround speakers slightly further away from TV set (page 14).

If color irregularity is observed...

Turn off the TV set once, then turn it on again after 15 to 30 minutes.

If color irregularity is observed again...

Place the speaker further away from the TV set.

If howling occurs

Reposition the speakers or turn down the volume on the receiver.

On cleaning

Clean the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

If you have any question or problem concerning your receiver, please consult your nearest Sony dealer.

Troubleshooting

If you experience any of the following difficulties while using the receiver, use this troubleshooting guide to help you remedy the problem.

There is no sound or only a very low-level sound no matter which component is selected.

- Check that the speakers and components are connected securely and correctly.
- Check that both the receiver and all components are turned on.
- Check that you have selected the correct component on the receiver.
- Check that MASTER VOLUME -/+ is not set at "VOL MIN".
- Check that the headphones are not connected.
- Press MUTING on the remote to cancel the muting function.

There is no sound from a specific component.

- Check that the component is connected correctly to the audio input jacks for that component.
- Check that the cord(s) used for the connection is (are) fully inserted into the jacks on both the receiver and the component.
- Check that you have selected the correct component on the receiver.

There is no sound from one of the front speakers.

• Connect a pair of headphones to the PHONES jack to verify that sound is output from the headphones. If only one channel is output from the headphones, the component may not be connected to the receiver correctly. Check that all the cords are fully inserted into the jacks on both the receiver and the component. If both channels are output from the headphones, the front speaker may not be connected to the receiver correctly. Check the connection of the front speaker which is not outputting any sound.

There is no sound from analog 2 channel sources.

- Check that the INPUT MODE is not set to "COAX IN" or "OPT IN" (page 30).
- (Models of area code CEL, CEK only) Check that you have not selected "MULTI CH IN".

There is no sound from digital sources (from COAXIAL or OPTICAL input jack).

- Check that the INPUT MODE is not set to "ANALOG" (page 30). Check that the INPUT MODE is not set to "COAX IN" for the sources from OPTICAL input jack, or set to "OPT IN" for the sources from COAXIAL input jack.
- (Models of area code CEL, CEK only) Check that you have not selected "MULTI CH IN".

The left and right sounds are unbalanced or reversed.

- Check that the speakers and components are connected correctly and securely.
- Adjust balance parameters in the LEVEL menu.

There is severe hum or noise.

- Check that the speakers and components are connected securely.
- Check that the connecting cords are away from a transformer or motor, and at least 3 meters (10 feet) away from a TV set or fluorescent light.
- Move your TV away from the audio components.
- The plugs and jacks are dirty. Wipe them with a cloth slightly moistened with alcohol.

There is no sound or only a very low-level sound is heard from the center or/and surround speakers.

- Make sure the sound field function is on (press A.F.D., MOVIE or MUSIC).
- Select a CINEMA STUDIO EX mode (page 28).
- · Adjust the speaker level (page 19).

There is no sound from the sub woofer.

 Check that the sub woofer is connected correctly and securely.

The surround effect cannot be obtained.

- Make sure the sound field function is on (press A.F.D., MOVIE or MUSIC).
- Sound fields do not function for the signals with a sampling frequency of more than 48 kHz.

Dolby Digital or DTS multi channel sound is not reproduced.

- Check that the playing DVD, etc. is recorded in Dolby Digital or DTS format.
- When connecting the DVD player, etc. to the digital input jacks of this receiver, check the audio setting (settings for the audio output) of the connected component.

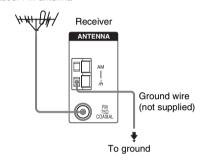
Recording cannot be done.

- Check that the components are connected correctly.
- Select the source component with input buttons.

The FM reception is poor.

 Use a 75-ohm coaxial cable (not supplied) to connect the receiver to an outdoor FM antenna as shown below. If you connect the receiver to an outdoor antenna, ground it against lightning. To prevent a gas explosion, do not connect the ground wire to a gas pipe.

Outdoor FM antenna



Radio stations cannot be tuned in.

- Check that the antennas are connected securely.
 Adjust the antennas and connect an external antenna if necessary.
- The signal strength of the stations is too weak (when tuning in with automatic tuning). Use direct tuning.
- Make sure you set the tuning interval correctly (when tuning in AM stations with direct tuning).
- No stations have been preset or the preset stations have been cleared (when tuning by scanning preset stations). Preset the stations (page 22).
- Press DISPLAY repeatedly so that the frequency appears in the display.

RDS does not work.*

- Make sure that you are tuned to an FM RDS station.
- · Select a stronger FM station.

The RDS information that you want does not appear.*

 Contact the radio station and find out whether they actually provide the service in question. If so, the service may be temporarily out of order.

There is no picture or an unclear picture appears on the TV screen or monitor.

- · Select the appropriate input on the receiver.
- Set your TV to the appropriate input mode.
- · Move your TV away from the audio components.
- * Models of area code CEL, CEK only.

Remote control

The remote does not function.

- Point the remote at the remote sensor on the receiver.
- Remove any obstacles in the path between the remote and the receiver.
- Replace all the batteries in the remote with new ones, if they are weak.
- Check if the command modes of the receiver and the remote is the same. If the command mode of the receiver and the remote is different, you cannot operate the receiver with the remote. To switch the command mode of the receiver, press I/Ů to turn off the power. Then, press I/Ů while pressing ENTER. Each time you press I/Ů, the command mode switches between "C.MODE.AV2" and "C.MODE.AV1". (The initial setting is "C.MODE.AV2".)
- Make sure you select the correct input on the remote.
- To activate the buttons with orange printing, press ALT first before pressing the buttons.
- Before you use the ★/★/◆/→ button for receiver operation, press MAIN MENU. To operate other components, press TOP MENU/GUIDE or AV MENU after pressing the input button.

Error message

If there is a malfunction, the display shows a message.

PROTECT

Irregular current is output from the speakers. The receiver will automatically turn off after a few seconds. Check the speaker connection and turn on the power again. If this problem persists, consult your nearest Sony dealer.

If you are unable to remedy the problem using the troubleshooting guide

Clearing the receiver's memory may remedy the problem (page 17). However, note that all memorized settings will be reset to their factory settings and you will have to readjust all settings on the receiver.

If the problem persist

Consult your nearest Sony dealer.

Reference sections for clearing the receiver's memory

To clear	See
All memorized settings	page 17
Customized sound fields	page 31

Specifications

Amplifier section

Power Output¹⁾

Models of area code CA (6 ohms 1 kHz, THD 0.7%)

STR-K760P: FRONT²): 60 W/ch

CENTER²⁾: 60 W SURR²⁾: 60 W/ch

(6 ohms 1 kHz, THD 10%)

STR-K760P: FRONT²): 100 W/ch

CENTER²⁾: 100 W SURR²⁾: 100 W/ch

Models of area code SP, E51 (6 ohms 1 kHz, THD 0.7%)

STR-K760P: FRONT²⁾: 80 W/ch

CENTER²⁾: 80 W SURR²⁾: 80 W/ch

(6 ohms 1 kHz, THD 10%)

STR-K760P: FRONT²): 100 W/ch CENTER²): 100 W

SURR²⁾: 100 W/ch

Models of area code CEL, CEK (6 ohms 1 kHz, THD 0.7%)

STR-DE497P: FRONT²): 80 W/ch

CENTER²⁾: 80 W SURR²⁾: 80 W/ch

(6 ohms 1 kHz, THD 10%)

STR-DE497P: FRONT²⁾: 100 W/ch

CENTER²⁾: 100 W SURR²⁾: 100 W/ch

Models of area code AU

(6 ohms 120 Hz-20 kHz, THD 0.09%)

STR-K760P: FRONT²⁾: 45 W/ch

CENTER²⁾: 45 W SURR²⁾: 45 W/ch

(6 ohms 1 kHz, THD 0.7%)

STR-K760P: FRONT²): 80 W/ch CENTER²): 80 W

SURR²⁾: 80 W/ch

(6 ohms 1 kHz, THD 10%)

STR-K760P: FRONT²⁾: 100 W/ch

CENTER²⁾: 100 W SURR²⁾: 100 W/ch

1) Measured under the following conditions:

Area code	Power requirements
CA	120 V AC, 60 Hz
SP, CEL, CEK	230 V AC, 50 Hz
AU, E51	240 V AC, 50 Hz

2) Depending on the sound field settings and the source, there may be no sound output.

Inputs (Analog)

MULTI CH IN*, CD,	Sensitivity: 800 mV
MD/TAPE, VIDEO 1, 2,	Impedance: 50 kiloohms
DVD	

Inputs (Digital)

DVD (Coaxial)	Sensitivity: -
	Impedance: 75 ohms
VIDEO 2 (Optical)	Sensitivity: -
	Impedance: -

Outputs (Analog)

MD/TAPE (OUT),	Voltage: 800 mV
VIDEO 1 (AUDIO OUT)	Impedance: 10 kiloohms
SUB WOOFER	Voltage: 2 V
	Impedance: 1 kiloohms

Reproduction frequency range:

28 - 20,000 Hz

Tone

10110	
Gain levels	±6 dB, 1 dB step

^{*} Models of area code CEL, CEK only.

FM tuner section

Tuning range	87.5 - 108.0 MHz
Antenna	FM wire antenna
Antenna terminals	75 ohms, unbalanced
Intermediate Frequency	10.7 MHz

AM tuner section

Tuning range

Models of area code CA

With 10-kHz tuning scale: 530 - 1,710 kHz³⁾ With 9-kHz tuning scale: 531 - 1,710 kHz³⁾

Models of area code E51

With 10-kHz tuning scale: 530 - 1,610 kHz Models of area code CEL, CEK, SP, AU With 9-kHz tuning scale: 531 - 1.602 kHz Antenna Loop antenna Intermediate Frequency 450 kHz

3) You can change the AM tuning scale to 9 kHz or 10 kHz. After tuning in any AM station, turn off the receiver. While holding down PRESET TUNING + or TUNING +, press I/O. All preset stations will be erased when you change the tuning scale. To reset the scale to 10 kHz (or 9 kHz), repeat the procedure.

Video section

Inputs/Outputs

Video: 1 Vp-p, 75 ohms

General

Power requirements

Area code	Power requirements
CA	120 V AC, 60 Hz
CEL, CEK	230 V AC, 50/60 Hz
AU	240 V AC, 50 Hz
SP	220 – 230 V AC, 50/60 Hz
E51	120/220/240 V AC, 50/60 Hz

Power consumption

Area code	Power consumption
CA	225 VA
CEL, CEK, AU, SP	150 W
E51	165 W

Power consumption (during standby mode)

0.3 W

Dimensions (w/h/d) (Approx.)

 $430 \times 145 \times 301.5 \text{ mm}$ $(17 \times 56/8 \times 117/8 \text{ inches})$ including projecting parts

and controls

6.5 kg (14 lb 6 oz) Mass (Approx.)

Speaker section

Front speakers (SS-MSP760L/ SS-MSP760R)

Center speaker (SS-CNP760)

Surround speakers (SS-MSP760SL/ SS-MSP760SR)

Front/center speakers Full range, magnetically

shielded

Surround speakers Full range
Speaker units 80 mm cone type
Enclosure type Bass reflex
Rated Impedance 6 ohms

Dimension (w/h/d) (Approx.)

Front/surround speakers $102 \times 150 \times 126 \text{ mm}$

 $(4 \times 6 \times 5 \text{ inches})$ • S

Center speaker $225 \times 102 \times 126 \text{ mm}$ (8 $7/8 \times 4 \times 5 \text{ inches}$)

Mass (Approx.)

Front speakers 0.8 kg (1 lb 13 oz)
Center speaker 1.0 kg (2 lb 4 oz)
Surround speakers 0.7 kg (1 lb 9 oz)

Sub woofer (SA-WMSP76)

Speaker system Active subwoofer,

magnetically shielded

Speaker unit 200 mm cone type Enclosure type Acoustically loaded bass

reflex

RMS output: 100 W (6 ohms, 100 Hz,

THD 10%)

Input LINE IN (input pin jacks)

Power requirements

Area code	Power requirements
CA	120 V AC, 60 Hz
CEL, CEK, SP	230 V AC, 50/60 Hz
AU	240 V AC, 50/60 Hz
E51	120/220~230 V AC, 50/60 Hz

Power consumption 75 W Dimensions (w/h/d) (Approx.)

> $270 \times 325 \times 398 \text{ mm}$ (10 3/4 × 12 7/8 × 15 3/4 inches) including front

panel

Mass (Approx.) 9.0 kg (19 lb 14 oz)

Supplied accessories

FM wire antenna (1)

AM loop antenna (1)

Speaker connecting cord, long (2) Speaker connecting cord, short (3)

Monaural connecting cord (1 phono to 1 phono) (1)

Coaxial digital cord (1)

Foot pads (speakers) (20) Foot pads (subwoofer) (4) Remote commander (1)

R6 (size-AA) batteries (2)

Speakers

• Front speakers (2)

· Center speaker (1)

• Surround speakers (2)

• Sub woofer (1)

For details on the area code of the component you are using, see page 3.

Design and specifications are subject to change without notice.

List of button locations and reference pages

How to use pages 50 and 51

Use this page to find the location of buttons that are mentioned in the text.

Illustration number

DISPLAY **2** (23, 25, 46)

Name of button/part Reference page

Main unit

ALPHABETICAL ORDER

A - L

A.F.D. (button/indicator) **9** (27, 28, 29, 45)

CD 25 (20)

DIMMER **3** (25)

DISPLAY [2] (23, 25, 46)

Display **5** (23, 25)

DVD 27 (20)

ENTER **13** (17, 34, 46)

FM MODE 22 (21)

Input buttons **18** (20, 30, 33, 34,

INPUT MODE 14 (26, 30)

IR (receptor) 4 (37, 46)

M - Z

MAIN MENU 17 (17, 30, 32, 34) MASTER VOLUME -/+ 12 (19, 20, 45)

MD/TAPE **26** (20)

MEMORY **21** (22)

MOVIE (button/indicator) 10 (28, 45)

MULTI CH IN* | 7 (20)

MULTI CHANNEL DECODING

(indicator)* **6** (20) MUSIC (button/indicator) **11** (29,

45)

PHONES (jack) 23 (20, 26, 45) PRESET TUNING -/+ 19 (22,

48) TUNER FM/AM **24** (20, 21, 34)

TUNING -/+ 20 (21, 48)

VIDEO 1 29 (20)

VIDEO 2 28 (20)

NUMBERS AND SYMBOLS

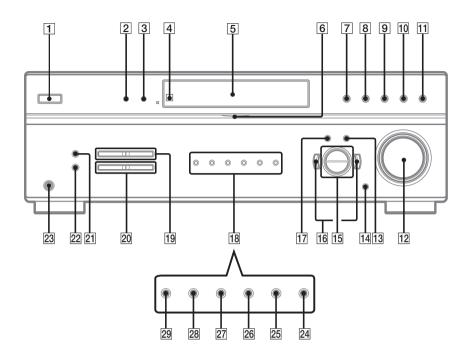
2CH (button/indicator) **8** (27, 29, 31)

+/- 15 (17, 30, 32, 34)

</> **16** (17, 30, 32, 34)

I/ \bigcirc (power) **1** (17, 22, 46, 48)

* Models of area code CEL, CEK only.



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